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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/919,113	07/31/2001	Suman K. Patel	56904US002	3453

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EXAMINER	
EGAN, BRIAN P	
ART UNIT	**PAPER NUMBER**
1772	5

DATE MAILED: 11/15/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

7C-5

Office Action Summary	Application No.	Applicant(s)	
	09/919,113	PATEL ET AL.	
	Examiner	Art Unit	
	Brian P. Egan	1772	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-40* is/are pending in the application.

4a) Of the above claim(s) *29-40* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-28* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

I. Claims 1-28, drawn to an adhesive article, classified in class 428, subclass 40.1.

II. Claims 29-40, drawn to a method of making an adhesive article, classified in class 427.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions I and II are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the product as claimed can be made by another and materially different process. For example, the adhesive need not be coated on the release liner or substrate. Instead, a preformed adhesive layer could be used that is subsequently applied via pressure.

3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

4. During a telephone conversation with Ms. Carolyn Fischer on November 5, 2002 a provisional election was made with traverse to prosecute the invention of group I, claims 1-28. Affirmation of this election must be made by applicant in replying to this Office action. Claims 29-40 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

5. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 1 and 22-23 are rejected under 35 U.S.C. 112, second paragraph, for failing to particularly point out and distinctly claim the subject matter which the applicant regards as his invention. The term "exhibits shrinkage" is both indefinite and infers a method limitation. First, it is unclear what the shrinkage is in relation to – does it shrink at room temperature, cold temperatures, or at warm temperatures? Is it stable at room temperature yet it expands and contracts at extreme temperatures? Second, something that, "exhibits shrinkage" would imply that there is something being done, i.e. some process, that is causing the substrate to exhibit shrinkage. A process limitation within an article claim is given little to no patentable weight. Furthermore, to claim something to "exhibit shrinkage" is merely describing a secondary effect based on a physical property of the substrate. The Examiner suggests defining the claim such that those effectuating variables are included within the limitation. The Examiner suggests defining such limitations in terms of thermal expansion and contraction properties rather than to state that the substrate "exhibits shrinkage." Proper clarification and/or correction are required.

8. Claim 2 is rejected under 35 U.S.C. 112, second paragraph, for failing to particularly point out and distinctly claim the subject matter which the applicant regards as his invention. The term, "good roll stability," is indefinite. Although the applicant defines "roll stability" in lines 22-31 on page 6 of the specification, it is still unclear. What does a rating of less than "3" actually mean? Proper clarification and/or correction are required.

9. Claims 11 and 25 are rejected under 35 U.S.C. 112, second paragraph, for failing to particularly point out and distinctly claim the subject matter which the applicant regards as his invention. The phrase, "wherein the adhesive is a heat-stable," is indefinite. The adhesive is a heat stable _____? The examiner suggests either deleting "a" such that the limitation reads, "the adhesive is heat-stable" or inserting "adhesive" after the phrase such that the limitation reads, "wherein the adhesive is a heat-stable adhesive." Furthermore, it is unclear what the applicant is defining "heat-stable" to mean. Is there a certain temperature at which the adhesive is stable to? Does "stable" in itself mean that the adhesive does not melt? Does "stable" mean that the adhesive does not expand or contract? Proper clarification and/or correction are required.

10. Claims 14 and 28 are rejected under 35 U.S.C. 112, second paragraph, for failing to particularly point out and distinctly claim the subject matter which the applicant regards as his invention. The term, "substantially free," is indefinite. How much photoinitiator may the adhesive contain to still be considered "substantially free" of photoinitiator? Proper clarification and/or correction are required.

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

12. Claims 1-8, 11-14, and 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 99/14281 in view of Kessel et al. (#5,432,006).

WO '281 teaches an article comprising an adhesive layer disposed between a substrate and a liner wherein the liner has an adhesive-facing surface releasably adhered to the adhesive (p.1, lines 8-10). Both the substrate and liner exhibit shrinkage (p.3, line 31 to p.4, line 4). The shrinkage of the liner ranges from substantially the same as to greater than the substrate (p.14, lines 7-12). The adhesive article exhibits good roll stability (p.6, lines 26-28). The adhesive is a heat-stable (p.12, lines 23-24), crosslinked (p.12, line 19), acrylate-based adhesive (p.12, lines 11-12). WO '281 does not explicitly state that the adhesive is substantially free of photoinitiator, nor, however, does WO '281 state that the adhesive comprises photoinitiator. Therefore, the adhesive does not comprise photoinitiator. The burden is upon the applicant to prove otherwise. Although WO '281 does not explicitly state whether the substrate has a force per unit width of at least two to three times greater than the liner (and $1x10^4$ Newtons/cm greater than the liner), WO '281 teaches that the selection of the relative amounts of thermoplastic elastomeric olefin (TEO) and other polymers in the release film composition are determined by the end properties needed for the release liner, e.g. tensile strength, tear resistance, etc. (p.7, lines 20-22). Therefore, it would have been obvious through routine experimentation to one of ordinary skill in the art at

the time applicants invention was made to have modified the composition of the release liner depending on the desired end product in order to create an adhesive article wherein the substrate has a force per unit width of at least $1x10^4$ Newtons/cm greater than the liner. Furthermore, it would have been obvious to modify the composition of the release liner such that the release liner comprises a force per unit width of at least $1x10^4$ Newtons/cm less than the substrate since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

WO '281 is silent with regards to the coefficient of friction of the adhesive facing surface of the release liner. WO '281 does teach, though, that the preferred embodiment of the release liner comprises a TEO core and a release layer or coating comprising a release material comprising polyethylene, fluorocarbon, polypropylene, or a combination thereof (p.3, lines 12-14). WO '281 is also silent as to whether the release coating composition comprises a cure-on-demand moisture curable composition having reactive silane functionality and an acid generating material that is free of ammonium salt.

Kessel et al., however, teach a silicone release coating wherein the coefficient of friction is at least 0.50 (Col. 9, Table 1) and the composition comprises a cure-on-demand moisture curable composition having reactive silane functionality and an acid generating material (Col. 5, lines 7-24; Col. 5, line 68 to Col. 6, line 3). Although Kessel et al. does not state that the composition is free of ammonium salt, Kessel et al. never state the existence of ammonium salt and thus the composition is inherently absent of ammonium salt. The burden is upon the applicant to prove otherwise. Kessel et al. teach the aforementioned release composition for the purpose of providing a release coating that is slippery in feel and useful as a release coating for

adhesive substrates (see Abstract; Col. 2, lines 37-39). It would have been obvious through routine experimentation to one of ordinary skill in the art to provide an adhesive article with a release liner exhibiting a coefficient of friction greater than 0.50 with a cure-on-demand moisture curable composition for the purpose of providing a release coating that is slippery in feel and useful as a release coating for adhesive substrates as taught by Kessel et al.

Therefore, it would have been obvious to one of ordinary skill in the art at the time applicants invention was made to have modified WO '281, motivated by the desire to comprise a silicone release coating, to coat the release liner with a cure-on-demand moisture curable composition exhibiting a coefficient of friction of greater than 0.50 as taught by Kessel et al. in order to provide a release coating that is slippery in feel and useful as a release coating for adhesive substrates.

13. Claims 9-10, 15-18, and 21-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO '281 in view of Kessel et al. ('006) and further in view of Rega et al. (#6,054,208).

WO '281 teach an adhesive article as detailed above. WO '281 further teach that the release liner can be used for any adhesive substrate (p.2, lines 19-20; p.12, lines 3-4; p.14, lines 17-19) although WO '281 fails to explicitly state that the substrate can be a retroreflective substrate.

Rega et al., however, teach an adhesive article comprising a release liner (Fig. 2, #17), an adhesive layer (Fig. 2, #16), and a retroreflective layer (Fig. 1, #10) . The retroreflective substrate comprises acrylic (Col. 16, line 53 to Col. 17, line 5), polyolefins (Col. 17, lines 10-13), and polymethylmethacrylate (Col. 21, lines 10-12), and further comprises encapsulated lens constructions (Col. 20, lines 10-12). Rega et al. teach the use of retroreflective sheeting for the

purpose of providing an adhesive article that can be applied to wood, plastic, or metal, and used to form highway signs, license plates, safety signs, and reflectors (Col. 1, lines 58-65). It would have been obvious through routine experimentation to one of ordinary skill in the art at the time applicants invention was made to have provided multiple different substrates including a retroreflective substrate for an adhesive article depending on the desired end product for the purpose of providing an adhesive article that can be applied to wood, plastic, or metal, and used to form highway signs, license plates, safety signs, and reflectors as taught by Rega et al.

Therefore, it would have been obvious to one of ordinary skill in the art to have modified WO '281, depending on the desired end product, to include a retroreflective substrate as taught by Rega et al. in order to provide an adhesive article that can be applied to wood, plastic, or metal, and used to form highway signs, license plates, safety signs, and reflectors.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian P. Egan whose telephone number is 703-305-3144. The examiner can normally be reached on M-F, 8:30-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Y. Pyon can be reached on 703-308-4251. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

BPE
November 13, 2002

ALEXANDER S. THOMAS
PRIMARY EXAMINER